



Vaping

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A vape or e-cigarette is a handheld device that uses battery power to heat a liquid, creating a vapour for inhalation. The vapour may contain nicotine, the addictive compound found in conventional tobacco cigarettes. Vaping is less harmful than smoking – a [2018 report commissioned by Public Health England](#)¹ stated that nicotine vaping products are at least 95% less harmful than cigarettes, although estimates vary (e.g. [one study](#)² estimated that vaping may be two-thirds less harmful than smoking). At least 80 chemical compounds have been detected in e-cigarette vapour and we don't know how all of them affect human health when inhaled, but several studies have found an [association between vaping and respiratory symptoms](#)³ including asthma, wheezing, chronic cough, phlegm and bronchitis. Because vaping is relatively new, we also don't fully understand the long-term health impacts e-cigarette use and second-hand exposure. And vapes that contain nicotine can be addictive, potentially contributing to dependence.

In Aotearoa New Zealand, vaping is regulated under the [Smokefree Environments and Regulated Products Act 1990](#),⁴ which was [amended in 2020](#) to cover vaping,⁵ with [new regulations](#)⁶ relating to vaping currently being phased in.

Vaping to quit smoking

According to the [Ministry of Health](#),⁷ vaping products have the potential to contribute to the [Smokefree 2025](#) goal⁸ by serving as a route out of smoking, but the Ministry considers it undesirable for non-smokers to take up vaping. [A New Zealand study](#)⁹ published in 2020 found that e-cigarette use was most common among ex-smokers, indicating that vaping is being used by smokers as a tool to transition away from cigarettes. The 2020/21 New Zealand Health Survey results also suggest that some smokers are substituting cigarettes for e-cigarettes, as [explored on Sciblogs](#)¹⁰ by a group of University of Otago academics.

The [Vaping Facts website](#)¹¹ produced by the Ministry of Health and the Health Promotion Agency provides information about vaping for people who want to quit smoking.

Vaping and young people

The safest approach for non-smokers is to avoid vaping. Some researchers are particularly concerned about uptake of vaping among non-smoking youth, with a [survey-based study](#)¹² published in 2021 finding that, among 13-18 year olds, 80% of ever-vapers and 49% of regular vapers reported that they were non-smokers when they first vaped. The 2020/21 New Zealand Health Survey found that, while there has been a recent sharp decrease in youth smoking, there has been [an even sharper increase](#)¹³ in vaping among people aged between 15 and 25 years old such that, overall, there has been an increase in the prevalence of current use of any nicotine-based product in this age group. And a [2021 survey of New Zealand secondary school students](#),¹⁴ published by the Asthma and Respiratory Foundation New Zealand and Secondary Principals' Association of New Zealand, found that 27% of students reported vaping in the last week (compared to 15% who reported smoking). 75% of vapers (or 20% of total respondents) reported vaping daily or several times a day, most with high nicotine doses, and 86% of those who reported vaping multiple times a day said that they felt addicted to vaping.

According to the [Smokefree Aotearoa 2025 Action Plan](#)¹⁵ published in December 2021, the Ministry of Health will “focus on supporting our children and young people to choose to never vape.” In addition, vaping products can’t be sold to people under 18 years of age, it is illegal to vape in cars carrying young people, and retailers have to advise the Ministry of Health if they are selling vape products so that the government has a better understanding of how many retailers are operating.

Vaping-associated pulmonary injury

In 2019, the US Centres for Disease Control and Prevention (CDC) reported an [outbreak of lung injury](#)¹⁶ associated with the use of vaping products (vaping-associated pulmonary injury, VAPI). Over 2,800 hospitalisations and nearly 70 deaths were reported as of 18 February 2020. Current evidence suggests that the outbreak was linked to vaping tetrahydrocannabinol (THC)/cannabis products, and in particular to the additive vitamin E acetate. THC/cannabis-containing e-liquids are illegal in Aotearoa New Zealand and there have been [no reports of VAPI here](#).¹⁷

If you experience an adverse event associated with vaping, you can report it through the [New Zealand Pharmacovigilance Centre](#).¹⁸

Read more

- [Smokefree NZ](#)¹⁹
- [Asthma and Respiratory Foundation NZ](#)²⁰
- [Health Navigator New Zealand](#)²¹
- [ASH – Action for Smokefree 2025](#)²²
- [Vaping and schools – Healthy Promotion Agency Te Hīringa Hauora](#)²³
- [Don’t get sucked in](#)²⁴
- New Zealand Science Media Centre [expert reactions to VAPI](#)²⁵ and the [link to vitamin E acetate](#)²⁶

Endnotes

¹ Report commissioned by Public Health England – Evidence review of e-cigarettes and heated tobacco products (2018), accessed on 24 February 2022
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684963/Evidence_review_of_e-cigarettes_and_heated_tobacco_products_2018.pdf

² BMC Public Health paper – Improving on estimates of the potential relative harm to health from using modern ENDS (vaping) compared to tobacco smoking (2021), accessed on 24 February 2022
<https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-021-12103-x>

³ The Journal of Allergy and Clinical Immunology review – Electronic Cigarettes and Their Impact on Allergic Respiratory Diseases: A Work Group Report of the AAAAI Environmental Exposures and Respiratory Health Committee (2021), accessed on 24 February 2022
<https://www.sciencedirect.com/science/article/pii/S221321982100057X?via%3Dihub>

⁴ Smokefree Environments and Regulated Products Act 1990, accessed on 24 February 2022
<https://www.legislation.govt.nz/act/public/1990/0108/latest/DLM223191.html>

⁵ Smokefree Environments and Regulated Products (Vaping) Amendment Act 2020, accessed on 24 February 2022
<https://www.legislation.govt.nz/act/public/2020/0062/latest/LMS313857.html>

⁶ Vaping Facts webpage – Law and Regulations, accessed on 24 February 2022
<https://vapingfacts.health.nz/the-facts-of-vaping/vaping-law-and-policy/>

- ⁷ Ministry of Health webpage – Position statement on vaping, accessed on 24 February 2022 <https://www.health.govt.nz/our-work/preventative-health-wellness/tobacco-control/vaping-smokefree-environments-and-regulated-products/position-statement-vaping>
- ⁸ Smokefree webpage – What is Smokefree 2025?, accessed on 24 February 2022 <https://www.smokefree.org.nz/smokefree-in-action/smokefree-aotearoa-2025>
- ⁹ *International Journal of Environmental Research and Public Health* paper – Patterns of Use of Vaping Products Among Smokers: Findings from the 2016-2018 International Tobacco Control (ITC) New Zealand Surveys (2020), accessed on 24 February 2022 <https://pubmed.ncbi.nlm.nih.gov/32932952/>
- ¹⁰ Sciblogs post – Key findings on smoking and e-cigarette use prevalence and trends in the 2020/21 NZ Health Survey (2021), accessed on 24 February 2022 <https://sciblogs.co.nz/public-health-expert/2021/12/17/key-findings-on-smoking-and-e-cigarette-use-prevalence-and-trends-in-the-2020-21-nz-health-survey/>
- ¹¹ Vaping Facts website, accessed on 24 February 2022 <https://vapingfacts.health.nz/>
- ¹² *Australian and New Zealand Journal of Public Health* paper – New Zealand Youth19 survey: vaping has wider appeal than smoking in secondary school students, and most use nicotine-containing e-cigarettes (2021), accessed on 24 February 2022 <https://onlinelibrary.wiley.com/doi/full/10.1111/1753-6405.13169>
- ¹³ Sciblogs post – Key findings on smoking and e-cigarette use prevalence and trends in the 2020/21 NZ Health Survey (2021), accessed on 24 February 2022 <https://sciblogs.co.nz/public-health-expert/2021/12/17/key-findings-on-smoking-and-e-cigarette-use-prevalence-and-trends-in-the-2020-21-nz-health-survey/>
- ¹⁴ ARFNZ/SPANZ report – The ARFNZ/SPANZ vaping in NZ youth survey (2021), accessed on 24 February 2022 <https://www.asthmafoundation.org.nz/assets/images/A-2021-report-into-youth-vaping.pdf>
- ¹⁵ Smokefree Aotearoa 2025 Action Plan (2021), accessed on 24 February 2022 https://www.health.govt.nz/system/files/documents/publications/hp7801_-_smoke_free_action_plan_v15_web.pdf
- ¹⁶ United States Centres for Disease Control and Prevention webpage – Outbreak of Lung Injury Associated with the Use of E-Cigarette, or Vaping, Products, accessed on 24 February 2022 https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html
- ¹⁷ Medsafe webpage – Reporting vaping side effects, accessed on 24 February 2022 <https://www.medsafe.govt.nz/profs/PUArticles/December2019/Report-vaping-side-effects.htm>
- ¹⁸ New Zealand Pharmacovigilance Centre reporting page – Report a side effect to Vaping, accessed on 24 February 2022 <https://nzphvc.otago.ac.nz/report-vaping/>
- ¹⁹ Smokefree webpage – Learn about vaping, accessed on 24 February 2022 <https://www.smokefree.org.nz/help-advice/learn-about-vaping>
- ²⁰ Asthma and Respiratory Foundation webpage – E-Cigarettes and Vaping, accessed 24 February 2022 <https://www.asthmafoundation.org.nz/your-health/e-cigarettes-and-vaping>
- ²¹ Health navigator webpage – Vaping, accessed on 24 February 2022 <https://www.healthnavigator.org.nz/healthy-living/e/e-cigarettes-and-vaping/>
- ²² Action for Smokefree 2025 webpage – Harm Reduction and Vaping, accessed on 24 February 2022 <https://www.ash.org.nz/vaping-and-harm-reduction>

²³ Health Promotion Agency webpage – Vaping and Schools, accessed on 24 February 2022

<https://www.hpa.org.nz/programme/education/vaping>

²⁴ Don’t get sucked in website, accessed on 24 February 2022 <https://dontgetsucked.in.co.nz/>

²⁵ Science Media Centre Expert Q&A – Should we be worried about vaping? (2019), accessed on 24

February 2022 <https://www.sciencemediacentre.co.nz/2019/10/03/should-we-be-worried-about-vaping-expert-qa/>

²⁶ Science Media Centre Expert Reaction – Vitamin E acetate found in lungs of vaping victims (2019),

accessed on 24 February 2022 <https://www.sciencemediacentre.co.nz/2019/11/12/vitamin-e-acetate-found-in-lungs-of-vaping-victims-expert-reaction/>